Science and Social Studies Update



PAST, PRESENT, AND FUTURE





Presenters



Science

Social Studies

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Test Development



STEP 1: Local Education Expert Item Writing Committees

STEP 2: Local Education Expert Bias/Content Review Committees

STEP 3: Field testing

STEP 4: Data Review Committees – BSC and CAC

STEP 5: Operational

STEP 6: Local Education Expert Standard Setting

(Only done with new tests)

Our assessment is developed by Michigan educators for Michigan classrooms.





Be Part of Our Team!

Use the information to the right to become a writer, reviewer, or panelist in our test development process.

Application URL:

http://www.cvent.com/Surveys/Ques tions/IDConfirm.aspx?s=06002a4ec578-417d-807f-542787fad180

or

www.michigan.gov/baa → Scroll to bottom of page → click Assessment Committee Participation Application

Science and Social Studies Pre-2015



Science

- MME
- MEAP
- Measured science standards - 2007 adoption
- Test item type included multiple choice (MC) items

- MME
- MEAP
- Measured social studies standards - 2008 adoption
- Test item type included multiple choice (MC) items

Science and Social Studies 2014 - 2015



Science

- M-STEP
- Measures student understanding of current (2007 adoption) science content standards
- MC items only on assessment
- Next Generation Science
 Standards (NGSS) update for content standards waiting for board review

- M-STEP
- Measures student understanding of current (2008 adoption) social studies content standards
- MC items only on assessment
- College, Career, and Civic Life Framework (C3) update for content standards waiting for board review

Science and Social Studies 2015 - 2016



Science

- Continue development for M-STEP
- Measures CURRENT science standards
- Major focus on writing technologically-enhanced (TE) items and added stimulus for MC items for online test

- Continue development for M-STEP
- Measures CURRENT social studies standards
- Major focus on writing technologically-enhanced (TE) items and added stimulus for MC items for online test

Engaging Online Assessment



HOT TEXT
HOT SPOT
MATCH
DRAG AND DROPS (TEXT AND GRAPHIC)
CHOICE
DROP DOWN
ORDER



MC Sample Item

Sample Grade 4 Item

P.EN.03.32

Distinguish the effect of fast or slow vibrations as pitch

Vibrations from a thick rubber band make a low-pitched sound. The vibrations from a thin rubber band make a high-pitched sound. This is *most likely* because the thin rubber band

- A moves faster.
- B moves slower.
- C is shorter.
- **D** is longer.



MC Sample Item

Sample Grade 7 Item

S.IP.07.12

Design and conduct scientific investigations

What is the main reason for clearly recording the procedures for an experiment?

- A so the experiment can be modified
- B so the experiment can be connected
- c so the experiment can be repeated
- D so the experiment can be summarized

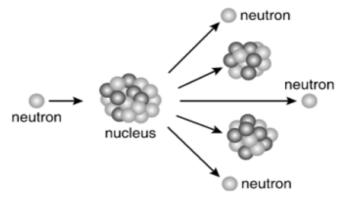


MC Stimulus Sample Item

Sample Grade 11 Item

P4.12A Describe peaceful technological applications of nuclear fission and radioactive decay

Use the diagram below to answer the question.



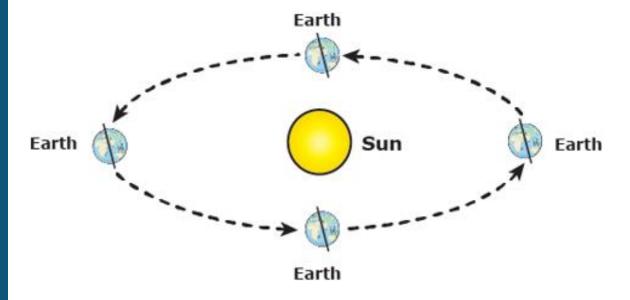
Which technology utilizes this process to obtain energy to generate electricity?

- A solar cell
- B combustion turbine
- C nuclear fission reactor
- D nuclear fusion generator



MC Stimulus Sample Item

Earth's Revolution Around the Sun



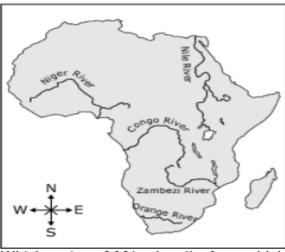


MC Stimulus Sample Item (Elementary)

Stem

Use the map and your knowledge of social studies to answer the question.

Major Rivers in Africa



Which region of Africa has the largest lakes?

Options

Α	northern

B western

C eastern

D southern



MC Stimulus Sample Item (Middle School)

Stem

Use the information in the box and your knowledge of social studies to answer the question.

. . . revolutions happen not upon every little mismanagement in public affairs . . . But if a long train of abuses . . . make the design visible to the people, and they cannot but feel what they lie under, and see whither [where] they are going; it is not to be wondered at, that they should then rouse themselves, and [attempt] to put the rule into such hands which may secure to them the ends for which government was at first erected . . .

—John Locke, 1690

Source: John Locke, Esq. from Two Treaties of Government

Which United States government principle is referenced in this quotation?

Options

A judicial review

B social compact

C checks and balances

D separation of powers



TE Sample Item (High School)

Item introductory text

The Constitution is the "law of the land" for the United States. The writers of the Constitution drew ideas from a number historical documents, including the Mayflower Compact, the English Bill of Rights, and the Articles of Confederation.

Interaction 1: Choice



Stem

Using your knowledge of social studies, select the ideas below that were drawn from these historical sources and placed into the Constitution.

Can the options be shuffled by the test delivery system?

Yes

Options

Option 1 - Executive power is checked by the other two branches of government.

Option 2 - Any powers not specifically enumerated are given to the federal government.

Option 3 - The power to tax originates with the Executive.

Option 4 - Everyone, including those in the government, are responsible for following laws.

Option 5 - Judicial branch reserves the power to imprison indefinitely.

Option 6 - Citizens have a representative voice in government.



TE Sample Item (High School)

Item introductory text

The Columbian Exchange was the interconnection of the all world zones in the 15th and 16th centuries.

The Columbian Exchange



Interaction 1: Graphic Drag and Drop - Without Unit Values



Stem

Based on the graphic above, organize the consequences into the areas where they occur. Some answers may be used more than once.

Drop Zone(s)

The Americas

Introduction of "New" World crops, such as potatoes, leading to an increase in population. Atlantic slave trade supports economic growth. Economic advancement as a result of increased revenue sources.

Afro-Eurasia

Atlantic slave trade supports economic growth. Economic advancement as a result of increased revenue sources.

The Great Dying as a result of increased disease transmission.

Introduction of large domesticated animals to the ecosystem.

M-STEP Online



80% of Schools - Online

83% of Student Population Tested Online

3.8 million Test Sessions

190,731 Sessions in a Single Day

97% Participation Rate Overall

Science and Social Studies Resources



M-STEP sample items - www.michigan.gov/baa



Social Studies and Science Resources



http://www.mi.gov/mde/0,4615,7-140-22709 70117-280911--,00.html

Spotlight Newsletter



Social Studies and Science Resources



Michigan Academic Standards -

www.Michigan.gov/academicstandards

Science

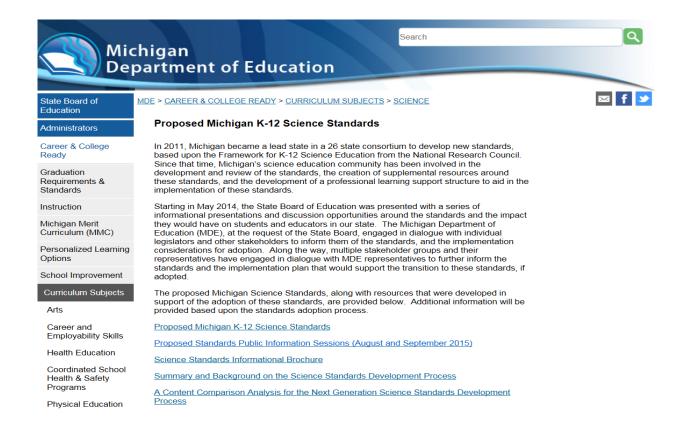
- Content Comparison Analysis of the Next Generation Science Standards and the Michigan Science Standards (updated 11-21-2014)
- · High School Science Companion Documents
- . K-7 Science Companion Documents
- K-7 Science Standards
- Model Course Mapping Resource
- Proposed Draft Michigan Science Standards (2014)
- Science Course/Credit Requirements
- State Board of Education (SBE) Presentations on Proposed Michigan Science Standards: A Vision for Science Education in Michigan
- State Board of Education (SBE) Presentations on Proposed Michigan Science Standards: Transitional Models for Science Education
- State Board of Education (SBE) Presentations on Proposed Michigan Science Standards: Assessing the Teaching and Learning of Science
- State Board of Education (SBE) Presentations on Proposed Michigan Science Standards: Michigan Science Standards Presentation
- State Board of Education (SBE) Presentations on Proposed Michigan Science Standards: Teacher Preparation, Credentialing, and Professional Learning for Science Education

- · Grade-Specific Resources for Social Studies K-8 GLCE and HSCE
- High School Social Studies Standards 1
- K-8 Social Studies Standards
- Social Studies Course/Credit Requirements
- Social Studies Resources





http://michigan.gov/science





http://www.michigan.gov/documents/mde/Final NGSS-MI-Content Comparison Study 473973 7.pdf?20150806105329

SRI Education



A Content Comparison Analysis of the Next Generation Science Standards and the Michigan Science Standards



http://www.michigan.gov/documents/mde/Michigan Science Standards Presentation 488330 7.pdf?20150806105329



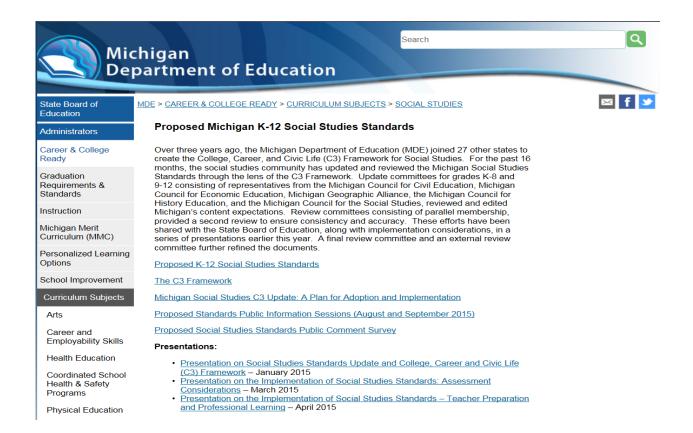


http://www.michigan.gov/documents/mde/Teacher Prep and PL for Science SBE Oct2014 488329 7.pdf?20150806105329





http://mi.gov/socialstudies





PASST Project-

http://passtmoodle.wmisd.org/





MI Open Book Project -

http://textbooks.wmisd.org/index.html

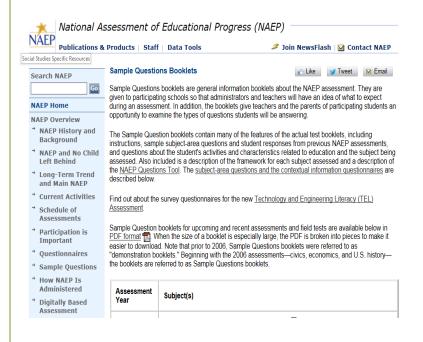


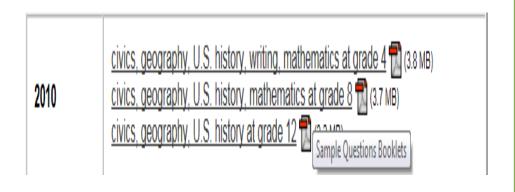
https://www.youtube.com/watch?v=EwmORogJzWw



National Assessment of Educational Progress (NAEP)

https://nces.ed.gov/nationsreportcard/about/booklets.aspx







Questions

Please ask any burning questions and we will do our best to accommodate your inquiry.

Questions?



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Thank you!



